

Remote Sensing of Environment

An Interdisciplinary Journal

VOLUME 31 1990

Contents

Milton O. Smith, Susan L. Ustin, John B. Adams, and Alan R. Gillespie
**Vegetation in Deserts: I. A Regional Measure of Abundance from
Multispectral Images** 1

Milton O. Smith, Susan L. Ustin, John B. Adams, and Alan R. Gillespie
**Vegetation in Deserts: II. Environmental Influences on Regional
Abundance** 27

B. F. T. Rudorff and G. T. Batista
**Spectral Response of Wheat and Its Relationship to Agronomic
Variables in the Tropical Region** 53

Kazuhiko Masuda and Tsutomu Takashima
**Deriving Cirrus Information Using the Visible and Near-IR Channels
of the Future NOAA-AVHRR Radiometer** 65

Announcement 83

B. Guenther, J. McLean, M. Leroy, and P. Henry
**Comparison of CNES Spherical and NASA Hemispherical Large
Aperture Integrating Sources: I. Using a Laboratory Transfer
Spectroradiometer** 85

M. Leroy, P. Henry, B. Guenther, and J. McLean
**Comparison of CNES Spherical and NASA Hemispherical Large
Aperture Integration Sources: II. Using the SPOT-2 Satellite
Instruments** 97

*P. M. Teillet, P. N. Slater, Y. Ding, R. P. Santer, R. D. Jackson,
and M. S. Moran*
**Three Methods for the Absolute Calibration of the NOAA AVHRR
Sensors In-Flight** 105

Contents continued

Garth W. Paltridge and Ross M. Mitchell

**Atmospheric and Viewing Angle Correction of Vegetation
Indices and Grassland Fuel Moisture Content Derived
from NOAA/AVHRR 121**

H. T. Chuah and H. S. Tan

**A Multiconstituent and Multilayer Microwave Backscatter Model for
a Vegetative Medium 137**

Short Communication

F. Maselli, C. Conese, G. Zipoli, and M. A. Pittau

**Use of Error Probabilities to Improve Area Estimates Based on
Maximum Likelihood Classifications 155**

Christian Mätzler

Seasonal Evolution of Microwave Radiation from an Oat Field 161

P. E. O'Neill and T. J. Jackson

**Observed Effects of Soil Organic Matter Content on the Microwave
Emissivity of Soils 175**

Victor S. Antyufeev and Alexander L. Marshak

**Monte Carlo Method and Transport Equation in
Plant Canopies 183**

Robert Meneghini and Kenji Nakamura

**Range Profiling of the Rain Rate by an Airborne
Weather Radar 193**

H. A. M. Thunnissen and G. J. A. Nieuwenhuis

**A Simplified Method to Estimate Regional 24-h Evapotranspiration
from Thermal Infrared Data 211**

Short Communication

Peter Abel

**Prelaunch Calibration of the NOAA-11 AVHRR Visible and Near
IR Channels 227**

